

WHAT IS CLAIMED IS:

- 1 1. An electronic system comprising:
2 a first integrated circuit comprising:
3 an input buffer coupled between a first supply terminal and a second
4 supply terminal and further coupled to receive an input signal on a pad; and
5 a clamp diode coupled between the pad and the first supply terminal; and
6 a resistor coupled to the pad, and further coupled to receive an input signal.
- 1 2. The electronic system of claim 1 further comprising:
2 a second integrated circuit coupled to the resistor and to provide the input signal.
- 1 3. The electronic system of claim 1 wherein the clamp diode has a anode and
2 a cathode, the anode is coupled to the pad, and the cathode is coupled to the first supply terminal.
- 1 4. The electronic system of claim 3 wherein the first supply terminal is
2 configured to receive a positive supply voltage, and the second supply voltage is configured to
3 receive a ground supply.
- 1 5. The electronic system of claim 1 wherein the integrated circuit further
2 comprises:
3 a pull-up output device coupled between the first supply terminal and the pad; and
4 a pull-down output device coupled between the pad and the second supply
5 voltage.
- 1 6. The electronic system of claim 5 wherein the pull-up device has a gate
2 coupled to a first predriver circuit, and the pull-down device has a gate coupled to a second
3 predriver circuit.
- 1 7. The electronic system of claim 6 wherein the integrated circuit further
2 comprises:
3 a core comprising a plurality of logic gates, and one of the logic gates is coupled
4 to provide a signal to the first predriver.

1 8. The electronic system of claim 6 further comprising a switch coupled
2 between the pad and clamp diode.

1 9. An electronic system comprising:
2 a first integrated circuit comprising:
3 an input buffer coupled between a first supply terminal and a second
4 supply terminal and further coupled to receive an input signal on a pad; and
5 a series of clamp diodes coupled between the pad and the second supply
6 terminal; and
7 a resistor coupled to the pad, and further coupled to receive an input signal.

1 10. The electronic system of claim 9 wherein the series of clamp diodes
2 comprises four diodes.

1 11. The electronic system of claim 10 further comprising:
2 a second integrated circuit coupled to the resistor and to provide the input signal.

1 12. The electronic system of claim 9 wherein each of the clamp diodes in the
2 series of clamp diodes has a anode and a cathode, the anode of one of the clamp diodes in the
3 series of clamp diodes is coupled to the pad, and the cathode of one of the clamp diodes in the
4 series of clamp diodes is coupled to the second supply terminal.

1 13. The electronic system of claim 12 wherein the first supply terminal is
2 configured to receive a positive supply voltage, and the second supply voltage is configured to
3 receive a ground supply.

1 14. The electronic system of claim 9 wherein the integrated circuit further
2 comprises:
3 a pull-up output device coupled between the first supply terminal and the pad; and
4 a pull-down output device coupled between the pad and the second supply
5 voltage.

1 15. The electronic system of claim 14 wherein the pull-up device has a gate
2 coupled to a first predriver circuit, and the pull-down device has a gate coupled to a second
3 predriver circuit.

1 16. The electronic system of claim 15 wherein the integrated circuit further
2 comprises:
3 a core comprising a plurality of logic gates, and one of the logic gates is coupled
4 to provide a signal to the first predriver.

1 17. An integrated circuit comprising:
2 a buffer having a first supply terminal, a second supply terminal, and an input;
3 a clamp circuit coupled between the input of the buffer and the first supply
4 terminal of the buffer; and
5 a resistor coupled to the input of the buffer,
6 wherein the claim circuit comprises a clamp diode.

1 18. The integrated circuit of claim 17 wherein the resistor is further coupled to
2 a pad.

1 19. The integrated circuit of claim 18 wherein the clamp circuit comprises one
2 diode having an anode and a cathode, the anode coupled to the input of the buffer and the
3 cathode coupled the first supply terminal.

1 20. The integrated circuit of claim 19 wherein the clamp circuit comprises a
2 series of diodes each having an anode and a cathode, the anode of a first diode in the series of
3 diodes coupled to the input of the buffer, and the cathode of a last diode in the series of diodes
4 coupled to the first supply terminal.

1 21. The integrated circuit of claim 18 further comprising:
2 an output driver comprising:
3 a pull-up device coupled between the first supply terminal and the input of
4 the buffer; and

- 5 a pull-down device coupled between the input of the buffer and the second
6 supply terminal.